## **EVALUATION PROCESS**

The Hetch Hetchy Restoration Study will step through the evaluation process utilizing existing work and resource management plans by federal, State, and local agencies to determine the benefits and costs of restoring Hetch Hetchy Valley (the Valley) and the interplay between the proposal to restore the Valley and the resulting need to replace water and power supplies. The end result is expected to be an appreciation for the extent of work remaining prior to meaningful public policy debate on the proposal.

Existing work and resource management plans. Existing work specifically on the proposal to restore the Valley consists primarily of two groupings - a cluster of work done in 1988 (by USBR, DOE, AOR, and NPS, see bibliography) and more recent work in 2003/4 (by ED, RHH, and UCD.) Each of these works will be examined and compared to existing resource management plans published by federal, State, and local agencies. Current federal, State, and local resource management plans, such as the California Water Plan Update and the California Outdoor Recreation Plan, will provide context for evaluating the collection of existing work on the proposal.

Hetch Hetchy Valley objectives. Public and agency involvement through outreach and education is necessary in the initial stages of the process to help shape the assessment, as well as develop restoration and recreation alternatives. This will also assist in the development of broad objectives, the identification of reporting metrics and the establishment of performance criteria. We envision the process will result four broad categories of alternatives: no dam removal with passive recreation, no dam removal with active recreation, dam removal with passive recreation, and dam removal with active recreation.

Restoration and recreation alternatives. A broad spectrum of recreational possibilities for Hetch Hetchy Valley will be identified. While we believe the public interest is focused on a particular subset of these possibilities (removal of O'Shaugnessy Dam and restoration of Valley flora and fauna) the entire spectrum needs to be understood in order to appreciate the public trade-offs that might ultimately be required.

The first step is to lay out the range of recreation alternatives, from expansion of recreational opportunities with existing facilities to a wide range of active to passive recreational opportunities following removal of the Dam. Likewise, restoration of the Valley after removal of the Dam could be accomplished by a wide range of active to passive management styles. Since Dam removal creates the more complicated alternative because of water and power supply replacement, this report will concentrate on the Dam removal alternative while using a relatively generic approach to avoid exclusion of other possibilities.

Benefits and costs for the spectrum of recreation and restoration alternatives will be identified. Some alternatives will require replacement of water and power supplies, which will be analyzed separately.

<u>Water management replacement requirements</u>. Prior to evaluating alternatives for water and power replacement, replacement requirements must be determined from the



Hetch Hetchy Valley restoration alternatives. Any new alternates must meet water reliability, water quality, economic, and institutional performance criteria. For example, water supply reliability must consider water rights, contracts, reservoirs, pipelines, treatment plants, and other infrastructure necessary to store treat and deliver a supply of water of a suitable quality that is as reliable as the present system and with an equal potential to meet future demand in the Bay Area.

<u>Water and power supply replacement</u>. Most recreation and restoration alternatives will require some level of water and power supply replacement. A wide array of possible components for replacing water and power supplies will be reviewed. The array will include all components identified in existing works. Combinations of components, or "bundles," will likely be needed to match varied replacement needs.

Individual components will be analyzed for variability due to geographic institutional participation and operational objectives, that can affect their contribution to a potential bundle. Water & power replacement bundles will also be evaluated for their impact on geographic areas including the Valley itself, the SFPUC's Hetch Hetch system, the lower Tuolumne (including the Districts), and the lower San Joaquin (including the Bay/Delta and statewide.) The benefits and costs of these potential packages that complement recreation/restoration alternative replacement needs will be identified.

